

CLAIMS

1. A method for preparing electrodes based on
5 activated carbon and carbon nanotubes on a collector,
comprising the following steps:

- (a) blending of an initial powdery carbon material and a solvent;
- (b) addition of a polymer binder and blending until homogenized;
- 10 (c) drying of the paste;
- (d) optionally, mixing of the paste; and
- (e) covering of the collector.

15 2. The method as claimed in claim 1, in which step a) is carried out by ultrasonication.

3. The method as claimed in either of claims 1 and 2, in which step a) is carried out at a temperature of
20 at least 50°C.

4. The method as claimed in one of claims 1 to 3, in which the initial powdery carbon material of step a) is obtained by a method comprising the following steps:

- 25 (f) dispersion of the carbon nanotubes in a solvent, preferably water;
- (g) addition of the activated carbon and blending; and
- (h) drying of the initial powdery carbon material.

30 5. The method as claimed in claim 4, in which the addition of activated carbon is followed by ultrasonication.

35 6. The method as claimed in one of claims 1 to 5, in which the initial powdery carbon material is a blend

of activated carbon and carbon nanotubes, in a weight proportion ranging from 95/5 to 50/50.

7. The method as claimed in one of claims 1 to 6,
5 in which the binder is an aqueous suspension of PTFE or styrene/butadiene.

8. The method as claimed in one of claims 1 to 7,
in which step d) is carried out to fibrillation of the
10 binder.

9. A method for preparing a paste based on activated carbon and carbon nanotubes, comprising steps a) to d) as claimed in one of claims 1 to 8.
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10. An improved-aging electrode obtained by the method as claimed in one of claims 1 to 8.

11. A supercapacitor comprising at least one
20 electrode as claimed in claim 10.